

Where the rubber meets the mat

A practical rubber band training compendium for all grappling styles

Short version

By John Flais aka Period



Discussion threads here: <https://www.kampfkunst-board.info/forum/showthread.php?190029-Leitfaden> & <https://www.strongfirst.com/community/threads/where-the-rubber-hits-the-mat-new-ebook-on-resistance-band-training-for-grapplers.22133/> (please read, additional info on progress there); feedback welcome, please post in the thread or send a PN.

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Be sure to consult with a certified physician and your coach(es) before attempting any exercise or recommendation mentioned here. Only work out when healthy and warmed-up properly.

Also, ANYTHING can get you injured and / or cause health problems (including doing nothing), so be sure to watch out for all kinds of aches and pains. If they occur, stop what you are doing, find and eliminate the cause of the problem. When in doubt, rest. If self-evaluation and rest is not sufficient, go talk to a qualified medical doctor, preferably one specializing in sports injuries. The author assumes no responsibility for any harm that may result to you, third parties or property attempting to do the exercises described here.

DEDICATED

To all my coaches and training partners, wherever they may be.

Thank you for your time, your advice, blood, sweat and tears.

Thank you for being there for me when nobody else was.

Thank you for making all the mistakes before me, and telling me about them so I could laugh when they happened to me.

Thanks for everything, including the scars and the cauliflower ears.

I love you guys.

So, let us embark on our training journey once more, knowing that

Two things are infinite: the universe and human stupidity; and I'm not sure about the universe.

[Albert Einstein]

&

After you have wrestled, everything else in life is easy.

[Dan Gable]

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1. CAUTION

While rubber bands aka resistance bands are generally considered a safe form of training, it is totally possible to hurt yourself with it. The most obvious danger comes from bands snapping, which latex bands will after a certain time, through mechanical damage, wearing out or simply aging. Inspect your bands regularly for signs of this, ideally before every use, even if the band you are using is advertised as being extra tough. A snapping band might give you a nasty welt or even damage an eye (NEVER pull a questionable unprotected band towards the eye without at least wearing safety glasses). In addition, you may lose your balance and fall if the resistance is suddenly gone. Also, physical parts like anchors and handles may come loose and shoot towards you. A hard object shot towards you accelerated by 50-100 kg of draw weight over a long draw length will shatter through most of the things in its way and be potentially lethal. I once did expander squats with a nominal resistance of 125 kg standing on a 5 kg iron bar which anchored the bottom ends. Said bar slipped out from under my bar feet, shot straight up in front of my head, took a sizeable chunk out of the concrete ceiling, came clattering back down and busted a floor tile. It was blind luck – and maybe a hint of reflexes that caused me to lean back – that it missed me entirely both times (I spent the next five minutes laughing – as Churchill said “There is nothing more entertaining in life than being narrowly missed by a bullet.”). So be sure to only use sturdy anchors and work well within your limits when using handles etc. Of course, enough resistance from rubber at the wrong angle can kill a rotator cuff just as easy as a weight... just saying. Warm up, be careful with new variations & be safe.

Another caution: While basic rubber bands and bungee cords are fairly cheap, people are always trying to market fancier and more expensive versions with added features (usually also making the thing heavier, bulkier and less portable). I am not mocking that, but you should know that it totally IS possible to spend more money on bands than on a 300 lbs set of weights (or 1-3 years of gym membership, for that matter), and then needing to replace the bands a few years or even months in (depending on band type and band care) while 300 lbs, as they say, will always be 300 lbs). Sometimes, manufacturers of these bands will claim that only THEIR products will work to help you towards your goals (e.g. Neil Adams’ bands @ <https://effectivejudo.com/uchi-komi-bands/> Interestingly enough, Adams wrote in his book “Olympic Judo: Preparation” that rubber bands were a very sub-par way of doing Uchi-komi, so I suppose we can be glad he remedied that...) or that all other options are unsafe regardless of how they are used, which is just plain BS. Decide for yourself what you want and how you want to spend your money, just know that used inner tubes gotten for free from bike stores etc. have worked just fine for people for decades (see sections 3.1 and 3.2 on equipment for discussion).

I should mention that latex (the most common type of rubber used in training) may cause allergic reactions for some people. There are alternatives, though (see section 3 and FAQ).

Also, again, talk to your doctor before starting any exercise regime (yaddayaddayadda, you know the drill).

In short, don’t kill yourself or go broke over rubber bands and then come to me to complain.

2. Introduction

This is the short version of my ebook (see <https://archive.org/details/john-flais-where-the-rubber-hits-the-mat-protoversion-1> for the full 138 page version). I decided to make a condensed version to make it more digestible to novice readers.

That book is the result of my roughly twenty years of experience training with rubber bands (I will use this term instead of “resistance bands” because the bands used are not all marketed as such – see chapter 3) and expanders of various types. I started training with my dad’s old Schmidt Sport Expander as a twelve year-old kid back in 2000 or so, though I was introduced to wrestling-specific band training quite a bit later (from 2009 on). This form of training is very common among the wrestlers and SAMBists I trained with, while other grappling styles such as Judo and BJJ have developed their own, slightly different approaches. I started compiling this information for various training partners and have been expanding it from there, choosing to write in English instead of in my native language so that more people might have a chance to read this booklet and use it as a basis for their own experiments.

Please note: all of this is my personal experience and opinion. Your mileage may vary.

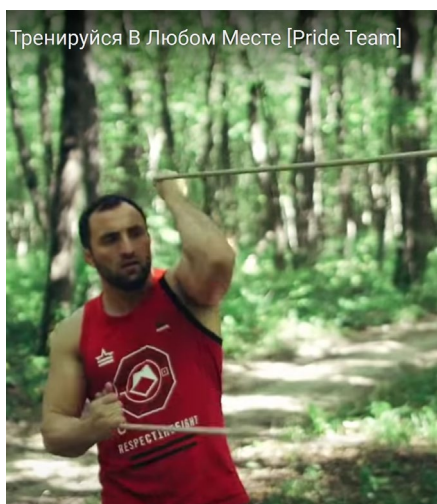


Before rubber guard, there was rubber bands!

The idea of rubber bands for grappling – as I was introduced to it – is a mix of specific strength & conditioning and technique drills. Especially among wrestlers in the former Eastern Block, this type of exercise with bands is huge, as exemplified by a Russian teammate telling me “Ringer ohne Gummi kann icchhh mir nicchht vorstellen.” (“I cannot imagine a wrestler without rubber” – and yes, the word “rubber” has the same connotation in German as it does in English); BTW, that teammate had no idea what girya [kettlebells] were – so much for Dragondoor’s marketing that kettlebells were “the” training tool of soviet wrestlers. Indeed, while almost all wrestlers do SOME form of weight training in their training – not necessarily curls, and not necessarily heavy squats, deadlifts and bench presses either –, that is usually considered an add-on twice per week or so, while for many of the world’s best wrestlers, the humble rubber band is a regular part of their morning routine. You may also be familiar with the use of rubber bands for Uchi-komi in Judo (though there is some debate about the usefulness of that, see section 9) where, once again, it is one of the most frequently and widely used training tools.

Generally, you can do various types of exercises with bands (see sections 7 and 8 for examples), ranging from traditional strength exercises to more or less specific imitations of the movements of various sports, including those of various grappling styles. You can choose a resistance that stops you cold in your tracks during or after the first rep, or a resistance that allows you to do several thousand reps per workout, or even in a single set. All of them can be beneficial, and all intensities and volumes can have their place in a training cycle, even though IMHO rubber bands come into their own more for movement training than for pure strength work, which is exactly what they are usually used for in grappling sports.

Rubber bands allow virtually unlimited range of motion at every joint, enabling you to do an almost unlimited selection of exercises impossible to do with weights. Almost all wrestling or grappling moves can be simulated to varying accuracy (with various amounts of logistic preparations) using one or two anchor points and various grips or attachments, along with the simulation of more traditional resistance training exercises; they can make bodyweight exercises harder or easier, whichever you choose. The advantage of rubber bands over most other training tools is that they are fairly cheap¹ and extremely portable – typically weighing anywhere between 100 and 2000 grams – in relation to the resistance they provide, and especially the long, medium thickness latex bands allow you to vary the resistance from a few pounds to impossible by folding them multiple times if needed. So you can get in a few thousand reps of your favorite wrestling or grappling moves any time you want (no partner required) and condition exactly the muscles you need for them (specific preparation, sometimes also referred to as “special exercises” or “functional training”, though that term has been misused quite a bit IMHO). The bands can also be used as rehab as well as prehab, allowing you to strengthen specific muscles (including any small stabilizers) you might be somewhat neglecting in your mat and/or weight training, as well as providing extra stimulus for all the others.



Тренируйся В Любом Месте [Pride Team]



Suples Training at the U.S. Olympic Training Site in Marquette,MI

From the Russian forests to the US Olympic Wrestling Training Center: Rubber bands are a universal training tool.

¹ A quality band like 5-10 m of 8-12 mm bungee cord that will last you at least a decade with correct use will set you back about 5 (!)-30 \$.

3. Equipment

There are a number of options you could use². I think for beginners, bungee cords / shock cords are probably the best option. Those are elastic bands composed of a number of thin rubber³ strands (multispan) or, more rarely, a single thicker rubber strand (monospan) and in either case a tightly-woven textile (usually PP, PE or PES⁴, in “military” versions more often also [glazed] cotton⁵) cover – similar to paracord, but flexible. For training purposes, I recommend a soft cover – basically anything other than PE.



While resistance bands are used by grapplers around the globe, there is a certain regional preference for band types. Bungee cords are probably the most common type of band found in grappling gyms in Croatia, Poland, Hungary, Germany, Ukraine, India and Malaysia; they excel in durability and cost effectiveness, as well as in direct sunlight, very hot and very cold environments (there are different versions available for those). They are also sold in Russia, but are less common than other types of bands, such as long rubber tubes and rubber strings.

One drawback of bungee cords is that they are potentially abrasive to bare skin and somewhat less comfortable to grip compared to latex bands (picture on the right: welts on the author’s shoulder incurred by doing shoulder throws with bungee cords at maximum extension [hitting the “stop” on several reps] while wearing a long-sleeved rashguard; these stayed visible for about a week). That means bungee cords work best in a large space with an anchor (post, door, wall hook etc.) wearing at least a tracksuit, but are somewhat less suitable for exercises with little clothing or where the band is anchored below the (bare) feet. But you can use padding or webbing for the handles – as seen in the next chapter – and put your feet into those.



Resistance and stretchability can vary significantly: Bungee cords usually stretch “only” to 70-150% - some up to 250% - before the extension is stopped by the textile cover. The resistance depends not only on the thickness, but also on how tightly the cover is woven around the elastic(s). Some manufacturers will list this as well as the resistance, but often you will find no-name products with no indication. For this reason, they are cut longer. It is recommended

² In the long version of my book (<https://archive.org/details/john-flais-where-the-rubber-hits-the-mat-protoversion-1>) I go into much more detail in chapter 3.

³ Might vary from manufacturer to manufacturer (information on rubber type is not always provided) but the ones I have seen seem to be synthetic rubber rather than natural latex, which would partially explain the price difference to speargun rubber.

⁴ PE being considered the most durable, PES the most skin-friendly and grippy option (but also most susceptible to mechanical damage), PP somewhere in between. See <https://www.kanirope.co.uk/shop/shock-cords-elastic-ropes> (resistances are given for the various individual products). While PE covered bungee cords can definitely be used for training, in my experience they are both very slippery and abrasive in the hand, so I would advise to attach grips of some kind or to tape the gripping part on the band.

⁵ See <https://www.theecwcorp.com/mil-c-5651d>

to use at least 5 m of bungee cord, but 7-8 m can give you more versatility, at the price of a higher weight. The important thing is not so much the length of the band, but how far a given band will stretch. Anchoring the band in the middle (see section 3.2), you want at least 2.5 m of stretch at each end, but 3 m is better in most cases. You will need this for certain exercises, but a band with this much stretch also allows you to vary the resistance mid-set by stepping closer to or further away from the anchor.

The recommended thickness to start out is 8 mm for lightweights, 10 or 12 mm for middle weights and 12 or 14 mm for heavyweights. I have tested a couple to give you an overview of the resistance levels:

Bungee cords						
Measurements	Band type					
	10 mm monospan PE	10 mm multispans PP	12 mm multispans cotton	12 mm multispans PP	12 mm multispans PS	14 mm multispans PE
Resistance @ 100% elongation	8 kg	9 kg	12 kg	16 kg	10 kg	18 kg
Peak resistance @ XXX % stretch	10 kg @ 125%	10 kg @ 110%	16 kg @ 165%	20 kg @ 125%	24 kg @ 200 %	27 kg @ 150%

As a rule of thumb, you ideally want a band that has a peak resistance equal to one quarter of your weight / weight class (each end / hand). That will give you a realistic feel, similar to grappling with an opponent of your weight.

A pro for bungee cords is availability – you can usually purchase 8 or 10 mm bungees at any larger hardware store at the desired length for a fair price (typically 0.7-2 € per meter), though bungee cords of 12 mm and up can be somewhat harder to find in local stores and you might have to order them online. But applying the concept of pseudo tapers, anyone can get a workout even if the band is actually too weak for them. You can get them in all kinds of colors, the most common however being “practical black”. Since bungee cords are cut to size, the textile cover may start to come apart at the ends if no care is taken. To prevent this, you can duct tape around the place where you want to cut BEFORE cutting (most retailers will do this); you can also sear the edges of the cut with a lighter to melt down the textile strands, provided they aren’t made from cotton.

3.1 Getting a grip

Since most bungee cords are a bit slippery, you may want to prepare the gripping area – the ends – a bit. You have several options, a few examples below.



From left to right:

1. tied loop handle padded with a foam sleeve
2. simple tied loop handle
3. short loop, end wrapped in grip tape (grip both strands below the knot)
4. short loop
5. end secured with metal clamps, wrapped in shrink tube; attached webbing loop
6. simple knot
7. end secured with metal clamps, wrapped in shrink tube

Be aware that most of these will shorten the band significantly. If you want to tie loops, get a band that is one meter longer (6 m minimum in most cases). On the other hand, unlike an attached webbing loop, a tied loop handle is effectively a short pseudo-taper (see section 3.3) and will effectively double the peak resistance of your band. This effect is more pronounced the bigger the loop is.

A thicker end will prevent the band from slipping out of your hand if it gets sweaty; the simplest way to achieve this is a simple knot. Of course, you can try to hold the band a centimeter or two above the knot and try to prevent it from slipping by gripping tightly. You can also use the knot to loop around a webbing band knotted or sewn into a loop.

Loops (padded with a foam sleeve, tape etc. or unpadded) allow you to either grip through – though you can also grip the loop from the outside if you wish – or to make a constrictor knot to loop the band around your wrists, ankles, elbows, knees or hips⁶. This increases the versatility of your setup.

⁶ See <https://www.youtube.com/watch?v=AfB4FZ1XLh4>.

You can also attach pieces of fabric to simulate gripping a Gi. You can use all kinds of Gi grip trainers including homemade ones, or even tie an entire Gi to the bands⁷.

You could also attach a climbing rope or even Gi rope to it (see the Suples HIRTS in the link section for inspiration). Unless you use multiple super strong bands, this will be easier than climbing a rope without using your feet, and the resistance will vary – easy at the beginning, hard at the end of the climb. You can use this to work more on endurance (for longer intervals than you could climb rope) or to help building up the strength and coordination for rope climbing if you are currently unable to. In any case, it is an ok substitute for rope climbing if you don't have access to a climbing rope.



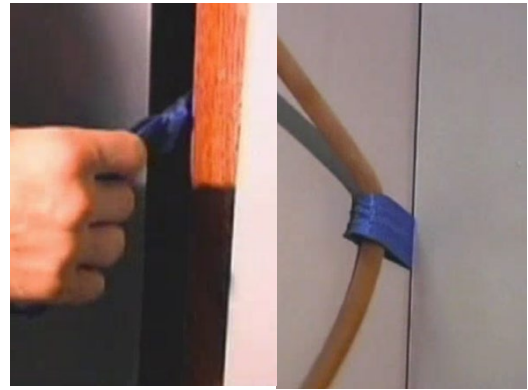
3.2 Anchors



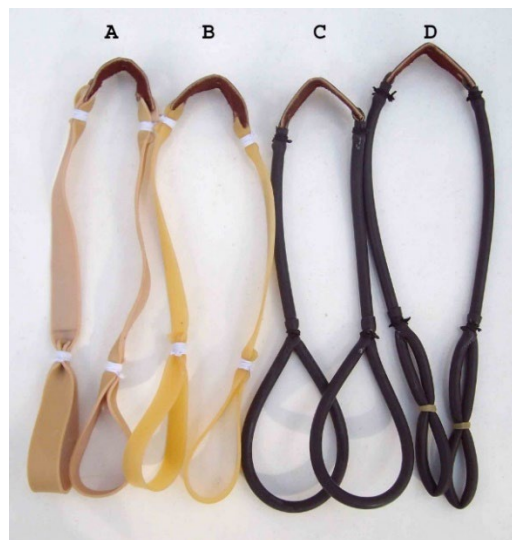
For our purposes, bands are usually anchored in the middle, and fixed so they won't slide side-to-side, which both wears down the band and decreases resistance. You can simply loop your band around a tree, lamp post or rail (second from the right, here shown on a stone mason's wooden hammer for clarity). However, using an anchor strap has its advantages, which is why I almost always use one. It protects the band and allows it to be attached to a variety of places securely. If you loop the anchor around the band, the band will not slide even if you just pull on one end.

⁷ As seen here: <https://www.youtube.com/watch?v=FdYdDyB1vZU> @ 3:30.

The simplest anchor strap is a length of webbing, about 50 cm long (second from the left). Notice that that produces a tight kink, which can damage the band; I therefore only use this with bands that have a fairly stiff PP cover, and only use 5 cm wide webbing. You can also pad the anchor or – as show here on the left and right – the band with a foam sleeve. On the left, we have a simple anchor with a knot at the end. This knot can be inserted on the hinge side of an open door, preferably from the side that the door closes to. Close the door, lock it if you can, and you have an indoor anchor that is height-adjustable (see pictures on the right). Finally (pictured on the far right) you could use strap with a buckle system, which is ideal when using thicker anchor points such as trees.



3.3 Customizing the resistance curve of resistance bands



Slingshot bands: tapered flat bands (left) and various pseudo-tapers on flat bands and tubes (right).

What do you do if your resistance band isn't the right resistance level? For example, you may only find thin or weak bungee cord at your local hardware store. Let me introduce you to the concept of « tapered bands » from slingshots (yes, the kids' toy). Tapered bands are rubber bands that have more material on one side than on the other. This can be achieved by cutting them asymmetrically, or – in the case of tubes – using a « pseudo-taper », meaning that part of the tube is folded over and fastened to itself at some distance from the anchor point. In slingshooting, this is done to get more speed, but you can also use it to adjust the resistance level.

We will use the concept of the pseudo-taper here; instead of tying it with a separate band (as seen above), we will just make a knot. Bungee cords are ideal for this because they have an inbuilt «stop» when reaching the end of their stretch, they will care a lot less about continued pull on them at that point. The only drawback is that you need a very long band to make it work (10-12 m total or 2x5-6m).



Pseudo taper in action: a 12 mm bungee (8m, 16 kg maximum draw weight) with a 1:2 pseudo taper for a 32 kg maximum draw.

By using a pseudo-taper, you can actually get double the regular peak resistance out of the band. In contrast to a normal double band, you will have a smoother, easier pull at the beginning, but the same peak resistance. That means not only do you need less band to achieve the same peak resistance at the same DOE, you can also modify the pseudo taper to fit your personal preferences.

When using pseudo tapers, it can actually make sense to cut the band in half, leaving you with two 4-5 m bands (I'd cut to 4 m only if the band stretches at least by 150%). In this case, you can decide whether you want the loop on the anchor side or whether you want to grip it (using a poacher's knot for the anchor). Personally, I choose to put the anchor on the loop sides for most exercises, but will reverse to the poacher's knot on the other end for shots etc., using the loop around my hips.

With slingshots, the recommended ratio for pseudo tapers is usually somewhere between 1:1 and 6:1 (single tube : doubled up part), with 2:1 to 5:6 being most common. With resistance bands, everything goes. Just bear in mind that the length of the doubled-up part will determine the distance you can stretch after reaching peak resistance of the single band.

Let me illustrate the effects of various pseudo-tapers in the tables below. The same logic and setup and precision (or lack thereof) apply as for my tests in chapter 3.3. The pseudo-tapers were produced by simply tying a loop of the desired length (ratios given below; for clarity: at 240 cm band length, ratio 3:1 equals a single band length of 180 cm + a loop length of 60 cm, 2:1 = 160 + 80 cm, 1:1 = 120 + 120 cm; with a band length of 182 cm, 3:1 = 136 cm + 46 cm, 2:1 = 121 + 61 cm, 1:1 = 91 + 91 cm). Since I did the test in my mat room where I have about 5.5 m of room from the anchor point, I chose to use band lengths that would produce a maximum distance of elongation (DOE) of 3 meters, and took resistance measurements at 33% (1m), 66% (2m) and 100% (3m) of DOE.

10 mm bungee cord, peak resistance 10 kg @ 125% stretch

Setup		Resistance @ DOE (distance of elongation) X		
Band length from anchor point	Pseudo-taper (single: double)	1 m (= 33 % max)	2 m (= 66 % max)	3 m (= 100 % max)
240 cm	None	4 kg	7 kg	10 kg
240 cm	3:1	4kg	8 kg	20 kg
240 cm	2:1	4kg	10 kg	20 kg
240 cm	1:1	7 kg	14 kg	20 kg

12 mm bungee cord, peak resistance 16 kg @ 165% stretch

Setup		Resistance @ DOE (distance of elongation) X		
Band length from anchor point	Pseudo-taper (single: double)	1 m (= 33 % max)	2 m (= 66 % max)	3 m (= 100 % max)
182 cm	None	7 kg	12 kg	16 kg
182 cm	3:1	7 kg	12 kg	32 kg
182 cm	2:1	7 kg	12 kg	32 kg
182 cm	1:1	8 kg	15 kg	32 kg

12 mm bungee cord, peak resistance 20 kg @ 125% stretch

Setup		Resistance @ DOE (distance of elongation) X		
Band length from anchor point	Pseudo-taper (single: double)	1 m (= 33 % max)	2 m (= 66 % max)	3 m (= 100 % max)
240 cm	None	8 kg	13 kg	20 kg
240 cm	3:1	8 kg	14 kg	40 kg
240 cm	2:1	8 kg	16 kg	40 kg
240 cm	1:1	10 kg	20 kg	40kg

The longer the loop, the earlier the single strand will reach near-maximum poundage and the earlier the second strand will come into play; therefore, the longer the distance you will be working against both strands. Not always will an increase in loop length affect the resistance curve noticeably: in the second bungee, a 3:1 and a 2:1 pseudo taper gave the same reading on my archaic instruments. This may be partially due to the fact that the bungee in questions is unusually stretchy. In other cases, we can see very clear and almost linear increases. It so happens that the first and the third bungee are very relatable, since they have an identical stretch coefficient as well as a clear relation in resistance by pure coincidence⁸. We can see that with a pseudo-taper of 1:1 with the 10 mm bungee, we can produce a resistance curve that is almost identical to a single strand of the stronger 12 mm bungee, even though a single 10 mm has exactly half the resistance of the 12 mm at all measurement points (so doubling it would produce an identical strength curve). You could also use this approach to slowly and gradually progress from a single band to a double band, without limiting yourself to the potentially fairly small range of motion (and/or few reps) in which you could initially pull the double band if it's too strong for you. You can, however, slowly work up to using a double band by increasing the length of the loop (1:1, 1:2, 1:3 => double band). Basically, pseudo tapers give you many additional options to adjust the resistance curve.

When building pseudo tapers, your maximum draw weight will always be dictated by the type of band you are using, which is somewhat limiting in the peak resistance you can produce. In order to produce exactly the peak resistance you want, you could connect various pieces of different types of bands, or you could play with the DOE. There is no law saying you HAVE to use the full stretch of a band, so if for example you had the second bungee cord in the example above (165% max stretch) and wanted to build a band that would give you 24 kg of resistance at a DOE of 3 m, you might want to use a pseudo-taper in the neighborhood of 1:1 and an active band length of 2.40 m per side = 5m total length (ca. 8 m of bungee). The reasoning here being that we can deduce from the rough strength curve above that our pseudo-tapered band will reach 25 kg of resistance at around 80-90% of maximum stretch (= 130-150% elongation in this case). Alternatively, you could use a double band with 2.8 meters per side (ca.

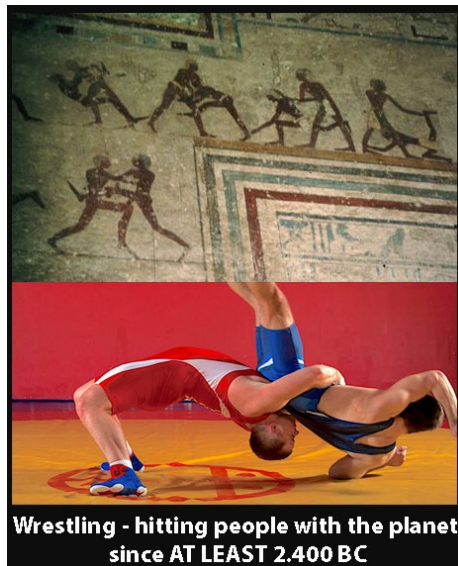
⁸ They are different types of bungee cord, made by different manufacturers. As stated before, the properties of bungee cords will vary much between manufacturers and thicknesses, so actually a thinner bungee can produce more resistance than a thicker one (in fact, I have one 9 mm bungee that produces up to 24 kg of pull as a single strand).

12 meters of bungee). Of course, if you truly wanted to be exact with the poundage, you would have to use more precise measuring equipment than me, produce more detailed strength curves etc., but I think you should get a general idea about the possibilities of this approach.

4. Commented Hyperlinks

So, what do you do with your bands? I have collected a number of links for you to answer this question, categorized below according to the grappling styles they are intended for. I recommend starting out by attempting one of the three first sample workouts from wrestling; once you get a feel for the bands, you can work up to more specific exercises mimicking your favorite techniques.

Wrestling



You saw it here first.

In wrestling, you will usually find rubber training exercises that mimic general wrestling moves or positions or exaggerate certain aspects of them to develop specific muscles. Very specific imitations are rarer, they are more often done with a partner. However, they can be used if no partner is available, to strengthen specific muscles involved in the motion etc. Bands can give you an active feedback as to whether you are doing the movement correctly, which is not necessarily the case for shadow-wrestling, and also can help to simulate and visualize a resisting opponent; therefore, imitation exercises with a band are also more beginner-friendly and easier to learn than shadow exercises.



<https://www.youtube.com/watch?v=tfotdMxXaG8&t=16s> Classic band circuit (mostly basic exercises + calisthenics) by Cary Kolat. If you are not familiar with Kolat, you must have been living under a rock: he has some of the best Freestyle technique breakdown videos on youtube.



<https://www.youtube.com/watch?v=l1RbYMeFHjo> Mohammed Yahiaoui of Legion Wrestling London demonstrating rubber band exercises as a home training suggestion for youth wrestlers (1st part without rubber bands here: <https://www.youtube.com/watch?v=WxQgRtIY7tw>). I have done this one quite often and must say I like it; especially in combination with the accompanying bodyweight circuit (which I modify according to my taste and needs). Sub-maximal sets with minimal rest are a genius idea in my opinion, and allow you to work yourself to the ground in no time (try doing 3 sets of strict 20 pull-ups with only 15 seconds of rest between sets if you don't believe me). You can play around with the reps and rest time to get you where you want. This was the first video that introduced me to the exercise I call "swimming" (bent-over rows with a circular motion, demonstrated from 04:30 in the first link), which has been very beneficial for my creaky shoulders, so I am very grateful for that. One thing I should point out is that 15 reps per exercise are fairly low amount of repetitions for rubber bands, and will require fairly high band tension if you want to have a solid workout. If you find that your band is not challenging you at the given rep scheme and you cannot increase the tension for whatever reason (band too short or strong to double up, not enough space to move back, already maxed out the rubber band budget for the year...), feel free to increase the reps, or to cut the rest between sets to zero (= just one big superset of all three rounds). There are three things "missing" in this circuit in my opinion (when comparing it to other common wrestling circuits): 1. Some form of duck-under 2. Some form of training for turning throws (usually a sideways triceps extension) 3. Some form of row with an upright torso.



Rubber bands + Dagestani playground + native training partners = perfect workout.

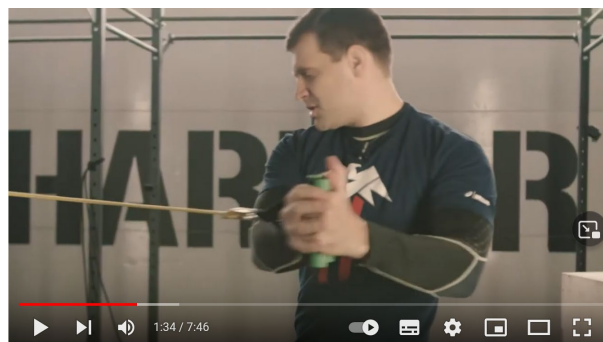
<https://www.youtube.com/watch?v=6SzP9Wjutno> circuit workout with rubber bands and bodyweight exercises on a playground in Dagestan with Roberto “Cyborg” Abreu. Basic exercises and some more wrestling specific exercises (pummeling, long duckunders) are shown.



<https://www.youtube.com/watch?v=zyzkgEkaDd4> Very good training montage from two US Greco wrestlers training in Armenia. Excellent demonstration of some of the more unusual but very specific rubber band exercises for pummeling (with a high number of fairly unusual variations of pummeling through both strands of the band with one arm) and throws from pummeling, duckunders (unusual variation, both bands held behind the small of the back) and high dives as well as some more general exercises like flies and reverse flies, plus some functional weight exercises for pummeling etc. The pull-up circuit is also worth trying ;) Highly recommended and very much of a hidden gem.

<https://www.youtube.com/watch?v=bxZ5OpI3Xdk> More of the above (partially same footage), here with a dosage prescription: 10 minutes of continuous rubber work (at the 3:00 mark). Also shows speed climbing ropes, pistol squats on a bench and advanced bridging.

<https://www.youtube.com/watch?v=wRunKSUFbvA> some more Armenian training footage, showing mostly pummeling (though not as detailed as the first two videos).



https://www.youtube.com/watch?v=l3W0_AbKv9c Demonstration of the Universal band system for wrestlers (older version, 5m bungee cords of various thicknesses with rotating handle attachments)

by Marco Čačić, showing mostly pummeling (including static work) and arm drags, but also some snapdowns, flies etc.

https://www.youtube.com/watch?v=m2l-Bv_2Atc 20 minutes of training with the Universal bands Tornado Rope (7 m bungee cord, used like a Battle Rope) by the creator, former Croatian wrestler Marco Čačić.

<https://www.youtube.com/watch?v=4fJjRiCILw4> & <https://www.youtube.com/watch?v=IVRLupsb6-g> some more training ideas with the Tornado Rope.

https://www.youtube.com/watch?v=iNHnZ6P_DJM Demonstration of the Universal Bands Combat belt with anchors on both sides and in the back for more options to attach bands for sprinting, shots etc.



Alexander Karelin: big on rubber bands.

<https://www.youtube.com/watch?v=gPshXPEZdrQ> Multiple-time Olympic and World champion (superheavy, Greco-Roman style) Alexander Karelin shows rubber band exercises using a long piece of thin solid rubber string or Thera-Band tubing silver (starting at around 22:00); interestingly, he favors a moving anchor (person) and emphasizes the importance of moving while exercising. (Russian, no synchronization or working subtitles available)

<https://www.youtube.com/watch?v=zB7Li3s96RQ> Shorter excerpt of the above video, but with (somewhat) working subtitles! Karelin explains the advantages of rubber and states one should use a rubber that one can pull continuously at a steady pace for at least 6 minutes. Also, he stresses posture and movement.



Nurali Aliev, freestyle wrestling genius⁹

⁹ <https://www.youtube.com/watch?v=6p-zb2W-ang>

<https://www.youtube.com/watch?v=CAwE6l582iU> Russian wrestling coach Нурали Алиев (Nurali Aliev aka Leopardik) showing basic rubber band techniques, including straight and circular motions for snapdowns, shoulder and hip throws as well as flies. Nurali Aliev is a true mat wizard and has a lot of spectacularly good technique videos (all in Russian, some even with working subtitles) on his channel as well (highly recommended – IMHO some of the deepest insights in Russian wrestling technique you will find online for free!)



Ivan Ivanov: world class wrestler turned national coach, inventor & marketing genius. Owner of SUPLES.

<https://www.youtube.com/user/suplestraining> Channel of Ivan Ivanov, inventor of HIRTS (a band system with various optional attachments, including a climbing rope), the Bulgarian Bag etc. Ivanov is one of the greatest marketing geniuses in the fitness industry, along with being a former world-class Greco-Roman wrestler, who later went on to coach the US Olympic team (which he used to develop and market his products ;-). The HIRTS is very present on Youtube, which the creator uses extensively to show off the various functions: Resistance band (https://www.youtube.com/watch?v=N_JxJeAc_kY, <https://www.youtube.com/watch?v=ozaOMIsXAi8>, <https://www.youtube.com/watch?v=3uDMvYyEPNA>, <https://www.youtube.com/watch?v=c3RPDagyK08> – often, grappling specific exercises are shown, usually by former members of the Bulgarian national teams that Ivanov recruited for the cause :-), Battle Rope (<https://www.youtube.com/watch?v=mfGQ-13R-G8>, https://www.youtube.com/watch?v=8XBnpX9_IB4), rope climbing simulator and external resistance for sprinting (<https://www.youtube.com/watch?v=oB4Jep5CDPI>), neck exercises (<https://www.youtube.com/watch?v=YMhCIRPBXx4>). A number of wrestling teams I have trained with own a HIRTS for team training, and they all seem to be very happy with it. Even if the original may be priced a bit steeply for many private users, you can always find inspiration with Ivanov's videos and exercise ideas – I know I did.

<https://www.youtube.com/watch?v=8s77JJPkzUI> Older video by Ivanov, showing a circuit of the US national Greco team using the Gladiator Wall with various attachments. On the far right (starting at 00:40), one wrestler shows pummeling exercises, including a fairly unusual downward variation starting at 00:50 (for pummeling in against the opponent's forearms, which poses less risk of being countered with an arm throw compared to standard high pummeling).



Andrey Brener, high level Ukrainian wrestler (early 2000s)¹⁰.

<https://www.youtube.com/watch?v=Y0s5hLQT6Mc> Ukrainian wrestler Andrey Brener shows and explains fireman's carry with bands.

<https://www.youtube.com/watch?v=bG42JJmgBY4> Andrey Brener shows and explains snapdown with bands.

<https://www.youtube.com/watch?v=yjslYKAyPJY> Andrey Brener shows woodchopping exercise for rotational strength with a long band and a piece of PVC.



<https://www.youtube.com/watch?v=9Ulq96wjkeY> UK wrestling coach Salman Mirza showing some solo drills with a bungee cord incl. pummeling (standing on the band), shots, locked grip through a loop for single legs (see screenshot), neck drills, plus some shuffle runs and footwork drills for warm-up

<https://www.youtube.com/watch?v=q7yr1AgGxwI> Salman Mirza showing various exercises w. 10 mm 15ft or 7 meters bungee cord

<https://www.youtube.com/watch?v=BJexyp7ANmc> ditto, shots holding the band in the hands, circular overhead duckunder pummeling with high anchor, donkey jump burpees

<https://www.youtube.com/watch?v=Vd9NgBZGedg> ditto, shots with loops on thighs, various plank drills

¹⁰ Andrey Brener used to sell a training set (bands + DVD) on rubber band training for wrestlers. I found him on Facebook and he graciously agreed to send me a copy. Thanks, Andrey! If you can get your hands on it, I think it's the single best instructional out there.



3x Uzbek Olympian Damir Zakhartinov (Willpower Wrestling At-Home Workouts) shows various wrestling drills (incl. suplex, duck-under, fireman's carry, pummeling, shots, snapdowns, battle-rope imitations) with long rubber tubes in the park. Also includes some circuit-training ideas. Overall, one of the most extensive series on using bands for wrestling training.

<https://www.youtube.com/watch?v=cAb2GGQCh5M>

<https://www.youtube.com/watch?v=l80Q8HNQ-XQ>

<https://www.youtube.com/watch?v=ZmlxONoe3Es> shadow-wrestling with two long bands, one attached to the waist and one looped around the hands.

<https://www.youtube.com/watch?v=mDZFB4djPxY> shadow-wrestling, some sprawl variations with bands looped around the ankles

<https://www.youtube.com/watch?v=nsHd-b2BHc8> leg exercises including resisted leg swings backwards & forwards, squats with bands, resisted jump squats etc.

<https://www.youtube.com/watch?v=toN0ThbalkI> upper body exercises including lots of creative pummeling variations as well as triceps extensions and snapdowns, arm circles, diagonal curls, butterfly swimming etc.

<https://www.youtube.com/watch?v=xHtXu2wh3fE> core training with the bands including lots of plank variations, resisted sit-ups and bicycle crunches, kneeling wood-choppers etc.



<https://www.youtube.com/watch?v=ILVQteVy56E> Bonus video: Calisthenics for wrestlers including a particularly interesting modified archer-push-up variation for parterre defense @ 3:10.

Judo

Judokas typically thrive on uchi-komi (throwing entries), which can be trained with one partner, two partners, a judo belt, rubber bands, cable pulleys or a combination thereof.



<https://www.youtube.com/watch?v=zy494bRg-BY> High level Judo and Sambo coach Steve Scott discusses options and execution of uchi-komi using rubber bands, cable pulleys etc. in depth. Especially recommended is his emphasis on various focuses of this training early in the video.



<https://www.youtube.com/watch?v=r-ytZjcPhtA> Olympiac silver medalist Travis Stevens explains his choice of rubber bands (light ones for rhythm, high speed and high reps – he says the bands are “just there to give you a balance” and you should feel like “chasing a rabbit”) and demonstrates exercises (overhead high pulls, moving foot sweeps, uchi-komi for seoi nage)

<https://www.youtube.com/watch?v=oqbZul4A7yw> Travis Stevens explains his favorite band exercises for Judo in-depth (off-balancing, uchi-komi for shoulder throws, uchimata, foot sweeps etc., also some basic exercises like shoulder shrugs) using a flat loop band (cut open)

<https://www.youtube.com/watch?v=H5kmfXwNtw8> recent video by Australian Olympian Matt d’Aquino using latex tubes, explaining the main problem with rubber band uchi-komi (repetitions need to be replicating the real throw as closely as possible, or you will “wreck your technique”). D’Aquino also demonstrates what he means by “being pulled back” (basically turning a seoi nage/shoulder throw entry into an arm spin/vertushka entry).

<https://www.youtube.com/watch?v=yHa1yMBQywk> suggested Uchi-komi workout by Matt d’Aquino.



<https://www.youtube.com/watch?v=ib77CF4nxFO> & <https://www.youtube.com/watch?v=gaUWhDXOxxA> High-level (Korean?) Judo master demonstrates rubber band uchi-komi for general off-balancing and osoto-gari (rarely shown with rubber bands) using the typical inner tubes. The part on how to grip the tubes to mimic the Gi is especially interesting. (English synchronization).



https://www.youtube.com/watch?v=koRXLgVx_30&feature=youtu.be Korean judoka Wang Chi Kun (Olympic silver medal 2008, 2x World champion @ 73 kg) and friends give an in-depth explanation and demonstration of uchi-komi (gripping variations and details) and basic exercises like rows and snapdowns with judo tubes and flat Thera-Bands (gold; blue and black hanging in the background). In use, the bands are folded lengthwise to create sort of a tube). Korean without synchronization or working subtitles, but fairly easy to follow nonetheless and with quite a bit of comedic value (especially the chubby one!).



Korean Judo 6th Dan James Kang, U&K Judo, shows various techniques using Danrho Judo tubes and latex strips:



<https://www.youtube.com/watch?v=wildmTHVXzc>,
<https://www.youtube.com/watch?v=66ipQpvFwBI>,
<https://www.youtube.com/watch?v=7YvucKNK2R0> &
https://www.youtube.com/watch?v=727oOml_GVY, <https://www.bjee.com/articles/how-to-improve-your-takedowns-using-drillsreIcanonical/> Olympic Judo champion Neil Adams explains his thoughts on uchi-komi, including his own uchi-komi band set (bungee cords with gi grip attachments) and shows drills including O-Uchi-gari (rarely shown with rubber bands)



<https://www.youtube.com/watch?v=EH65sjtugFc> Four-time Olympian & US Olympic coach Jimmy Pedro shows basic exercises & uchi-komi (Ko-uchi gari, Morote Seoi Nage) using uchi-komi bands and a seated partner as an anchor.



<https://www.youtube.com/watch?v=G7P9EOvoKt4> 32 drills (uchi-komi and general exercises) by JudoFightingFit, not only for Judokas.

<https://www.youtube.com/watch?v=ZwX9AczD3dY> JudoFightingFit detailed 15 minute uchikomi breakdown including combinations.

Sambo

Sambo training methodology usually falls in somewhere between Judo and wrestling. Sambo is by nature eclectic and highly competitive (so things that don't work rarely last long), which also holds true for their training methodology.

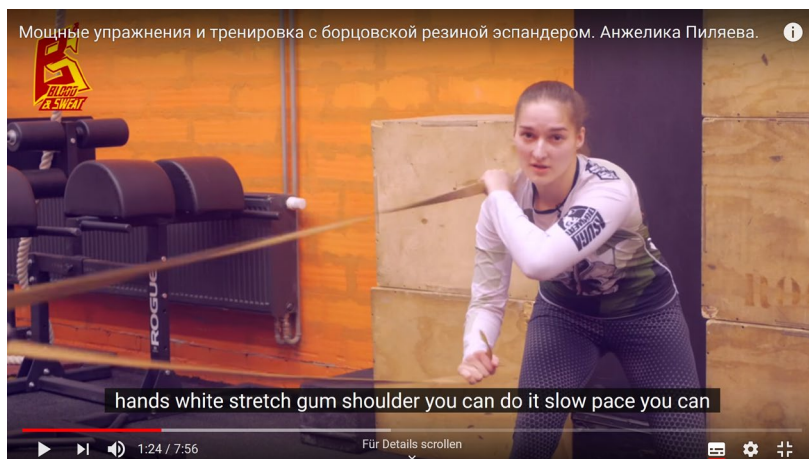


<https://www.youtube.com/watch?v=epCs7xVnF2w> Judo & Sambo coach Андрей Шидловский (Andrey Shidlovsky) 55 min of rubber bands, very creative, includes applications (belt grip, tomoe nage O-uchi-gari, fireman's carry, shots, seoi-nage [many variations], foot sweeps, ura-nage/pick-ups, morote gari, ground work like rubber-resisted bridging and arm-bars) also shows battle rope use, arm circles in various directions, one-arm rows, circuit suggestions, shadow grappling demonstration, wheelbarrow walk with bands, push-up drills, rubber band pull-downs/"muscle-ups", doubled-up grip on rubber string to simulate lapel grip, shadow-wrestling with rubber bands for Combat Sambo...; also, his rubber band collection might even be more impressive than mine :D (Russian, no working subtitles, but mostly self-explanatory) If you watch just one video on Russian-style rubber band work for Judo/Sambo, make it this one, even if you don't understand any Russian (there seem to be no working subtitles so far).



Ivan Vasylichuk, Honored Master of Sports & World champion in Sambo. Prefers "rubber rubber" over bungee cords.

<https://www.youtube.com/watch?v=RaD0PmFb-z8> & <https://www.youtube.com/watch?v=s4t3v5uFa> A Rubber bands for Sambo by Sambo World Champion & Honoured Master of Sports Ivan Vasylichuk (Sila Partera). Vasylichuk explains his preferences in equipment choice ("rubber rubber" = bare latex bands), demonstrates exercise variations and gives recommendations for repetitions (anyone want to do 3000+ entries for fun? Should only take like three hours) and varying tempo ("broken tempo"). Vasylichuk shows particularly dynamic nage-komi (full throws) with rubber bands, with a very pronounced rotation of the upper body (see above). Russian with English synchronization.

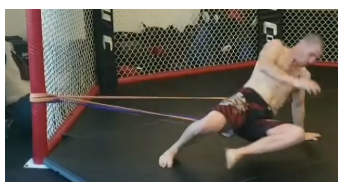


<https://www.youtube.com/watch?v=ZHyfH7osSBw> Using long flat rubber bands, female Sambist and grappler Anzhelika Pilyaeva demonstrates snapdowns, pummeling, long duck-unders, shot drills, lunges, foot sweeps, throw entries (Seoi-Nage, Tai Otoshi & Harai Goshi), triceps extensions with and without accompanying forward lean, squats and even some boxing drills for Blood & Sweat MMA,. She especially makes a valid point that any exercise can either be done upright or in a low fighting stance, which will alter the exercise slightly and potentially make it more specific. Pilyaeva suggests doing each exercise for 30 seconds in the beginning, then working up to 60 seconds. She also recommends alternating running (sprinting) 200-300 meters and rubber band work, doing one sprint in between each set of rubber work. Russian, more or less working subtitles.

BJJ



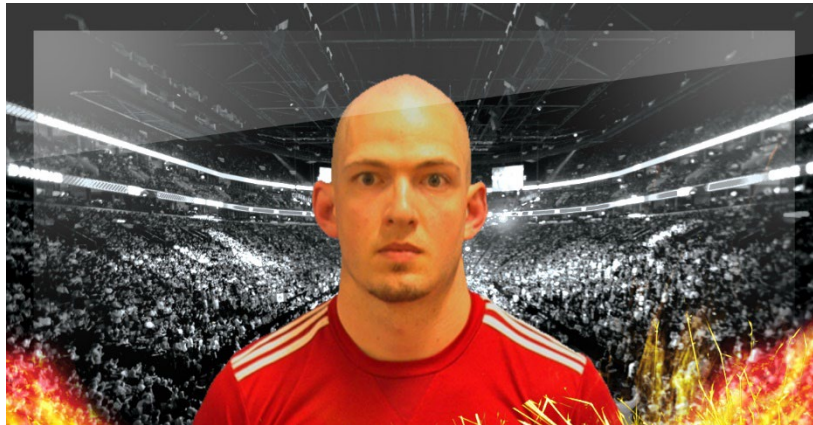
<https://www.youtube.com/watch?v=UXpFRWkFL5o> BJJ blackbelt Gabriel Kitober shows various rubber band drills for BJJ, including double under pass, spider guard escape and hip escape using a Dopamineo band.



https://www.youtube.com/watch?v=-7_CG99INRU Brandon Alexander shows various escape drills using two short loop bands.

<https://www.youtube.com/watch?v=p-SSRKQ8qhE> Rubber band work for the guard using Jitsgrips (a short band with attached gi handles).

5. About the author



Mug shot of the author for an Austrian Bundesliga wrestling team, 2017 season

John Flais is an author's pseudonym (bestowed by an Italian track coach who repeatedly failed to remember his real name) of a guy who also writes on the German *kampfkunst-board.info* and *strongfirst.com* under the nickname of *Period*. He also responds to a number of other nicknames he accumulated over the years, such as "the machine" (earned after winning a push-up bet at the age of 16) and "The Italian Stallion" (coined by German announcer Klaus F. at an amateur wrestling event). In his everyday life, he is a scientist in the field of humanities, which reflects in the way he likes to write (hate it or love it). He chooses to write under this pseudonym for professional reasons (for the time being), to keep his work life and hobbies separate.

The author (born in Italy in 1988) started out his athletic career in competitive archery, then changed to track and field in his teens as a middle distance and cross-country runner. He took up wrestling (Greco and Freestyle) at the ripe age of 21 and quickly fell head over heels (quite literally) in love with it, cross-training in historical European wrestling, Sambo, Judo, Sumo and whatever other standup grappling arts he came across (Ranggeln and Schwingen among them) and continues to expand in this regard. He came into contact with wrestling-specific rubber band training after 2009 through his teammates and coaches, mostly of Russian nationality (including a Dagestani freestyle coach, who happens to be Dauren Kurugliev's youth coach). Training up to 25 hours per week while going through university in Germany and Austria, he managed to make up some lost time and progress enough to allow him to compete as a welterweight and light-heavyweight (<74 resp. <84 kg, occasionally moving up to heavyweight or superheavyweight¹¹) in the highest wrestling league in Austria (Bundesliga) in both Greco and Freestyle from 2013 to 2017, and to be encouraged to gravitate towards coaching by his own coaches. You may meet him these days at various international wrestling events, where he will be sitting with the Dagestani fans (easily recognizable as the least bearded among them, and the one who understands the least Russian) along with his coach, where he will be discussing who apparently didn't do enough rubber band training in preparation as well as this year's fashion of fouls. His hobby horse is conditioning for wrestling with a focus on Eastern Block methods, grappling-oriented calisthenics and of course, rubber bands.

¹¹ That required drinking copious amounts of fluid – like 6 liters – the hour before the weigh-in and "holding it in" until weigh-ins to make the minimum weight.